What is claimed is:

1.    A program information broadcasting system,
comprising the steps of :

     preparing a master data of program information

5   for recognizing a broadcasting program with program
elements of said broadcasting program being divided into
a plurality of items and being turned to data at a
center;

     preparing a program basic information with

10   minimal necessary items for preparation of a program
guide being extracted from said data constituting said
master data;

     transmitting said master data and said program
basic information simultaneously with the broadcasting;

15   and

     receiving, reproducing and displaying said
program basic information before completion of receipt
of said master data at a receiving terminal unit.


20   2.    A program information broadcasting system
according to Claim 1, wherein said program basic
information is prepared by extracting information with
higher utilization frequency.


25   3.    A program information broadcasting system

according to Claim 1, wherein said program basic
information is prepared by extracting data based on
predetermined attributes from the master data of the
program information.

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4.     A program information broadcasting system
according to Claim 3, wherein the attributes serving as
basis for preparation of the program basic information
are related to at least one of program category,

10   individual information or service provider.

5.     A program information broadcasting system
according to Claim 4, wherein a plurality of types of
program basic information are prepared as many as

15   related to said attributes.

6.     A program information broadcasting system
according to Claim 5, wherein said plurality of program
basic information comprise data, which are prepared by

20 · turning the attributes serving as basis for preparation
of said program basic information to key code and are
arranged in a summarized table, and data, which are
prepared by arranging identification information of the
program extracted using said attributes as basis in a

25   summarized table, whereby said data prepared by turning

said attributes to key code and arranged in a summarized

table are linked to said data prepared by arranging

identification information in a summarized table.

5    7.    A program information broadcasting system

according to one of Claims 1 to 6, wherein said master

data and said program basic information are transmitted

at cycles different from each other.

10    8.    A program information broadcasting system

according to Claim 7, wherein said master data are

transmitted at longer cycle than said program basic

information.

15    9.    A program information broadcasting system

according to one of Claims 1 to 8, wherein, in

transmitting the program information, a program extended

information is prepared by deleting the data used for

preparation of the program basic information from the

20    master data, and the program basic information and the

program extended information are linked to each other

and are transmitted.

10.    A program information broadcasting system

25    according to Claim 1, wherein a mail is broadcast at the

center in addition to transmission of the program

information, and said mail is linked to said program

information so that the receiving terminal unit can gain

access to the link data of the program information from

5   the received mail.


11.      A program information broadcasting system

according to Claim 10, wherein data to call function to

enable viewers to participate in voting, questionnaire,

10   etc. are incorporated in the mail to be transmitted.


12.      A program information broadcasting system

according to Claim 11, wherein, in transmitting the

mails, a summarized table of the mails is broadcast, and

15   it is checked at the receiving terminal unit whether the

items listed in the summarized table of the mails have

been already read or not, and only the mails not yet

read are displayed.


20   13.      A program information broadcasting system

according to Claim 11, wherein, in transmitting the

mails, the mail is transmitted together with some

receiving condition, and it is checked at the receiving

terminal unit whether the user of the terminal unit

25   satisfies said receiving condition or not, and the mail

is displayed only when the user satisfies the receiving condition.

14.    A broadcasting device, comprising:

5    program information data preparing means for dividing program elements constituting a broadcasting program into a plurality of items and turning them to data and for preparing a master data of program information to recognize the program;

10    information retrieval means for retrieving minimal necessary items for preparation of a program guide from the master data;

transmission data generating means for converting said master data and said program basic information to

15    transmittable data; and

transmitting means for transmitting said transmission data.

15.    A broadcasting device according to Claim 14,

20    wherein there are further provided mail data preparing means separately arranged from said program information data preparing means and used for preparing mail data, and transmission information data base means for integrating the program information data with the mail

25    data and sending to the transmission data generating

means.

16.    A broadcasting device according to Claim 15, wherein said transmission information data base means

5    sends the integrated data of the program information data and the mail data to the information retrieval means.

17.    A broadcasting device according to Claims 15 or Claim 15

10    ~16~, wherein there is further provided voting and questionnaire data preparing means for preparing voting and questionnaire data and for sending the data to the program information data preparing means.

15   18.    A broadcasting device according to Claim 17, wherein said voting and questionnaire data preparing means sends the prepared voting and questionnaire data to the mail data preparing means.

20   19.    A receiving terminal unit, comprising:
        receiving means for receiving a master data of a broadcast program information;
        program basic information preparing means for extracting minimal necessary items for preparation of a

25   program guide from data, which constitute the received

master data, and for preparing a program basic information;

storage means for storing data of said program basic information;

5     data reproducing means for reproducing data of the received program information and the program basic information; and

control means for controlling various types of operations described above, whereby:

10     when an instruction to display the program information is inputted, said control means receives the master data of said program information, prepares a summarized table of the programs by reading the program basic information from said storage means.

15     20.     A receiving terminal unit according to Claim 19, wherein said program basic information is prepared by extracting information with higher utilization frequency.

20    21.     A receiving terminal unit according to Claim 19, wherein said program basic information is prepared by extracting data based on predetermined attributes from the master data of the program information.

25    22.     A receiving terminal unit according to Claim 21,

wherein said attributes serving as basis for preparation of the program basic information are related to at least one of program category, individual information or service provider.

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23. A receiving terminal unit according to Claim 22, wherein said plurality of types of program basic information are prepared as many as related to said attributes.

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24. A receiving terminal unit according to Claim 23, wherein said plurality of program basic information comprise data, which are prepared by turning the attributes serving as basis for preparation of said

15 program basic information to key code and are arranged in a summarized table and data prepared by arranging identification information of the program extracted using said attributes as basis in a summarized table, and said data prepared by turning said attributes to key

20 code and arranged in a summarized table are linked to the data prepared by arranging the identification information in a summarized table.

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